WHAT IS CLAIMED IS:

1. A combined radar and laser detector having a Global Positioning System (GPS) receiver and using wireless communication, comprising:

a signal receiving module, which comprises a signal processing unit for detecting a signal received through a horn antenna, a laser receiving unit for receiving a laser signal, a central processor unit for controlling detection of the signals received through the signal processing unit and the laser receiving unit, analyzing the detected signals, and outputting information data of the detected signals, and an information transmission unit for wirelessly transmitting the information data output from the central processor unit; and

an information display module, which comprises an information receiving unit for receiving the information data wirelessly transmitted from the information transmission unit of the signal receiving module, a GPS engine for detecting GPS data transmitted from a satellite, a memory unit for storing coordinates data used to indicate a location of a moving vehicle, an audible indication unit for audibly outputting the data received through the information receiving unit or detected through the GPS engine, a visual display unit for visually displaying the data received through the information receiving unit or detected through the GPS engine, and a

central processor unit for controlling operations of the visual display unit and the audible indication unit according to the data received through the information unit or detected through the GPS engine.

2. The combined radar and laser detector as set forth in claim 1, wherein the information display module further comprises a serial communication unit for communicating with a user's computer, and a switching unit for temporarily restricting an operation of the GPS engine under control of the central processor unit when data is downloaded through the serial communication unit.

3. The combined radar and laser detector as set forth in claim 1, wherein the information display module further comprises a back-up battery for supplying power to an internal memory of the GPS engine.

4. The combined radar and laser detector as set forth in claim 1, wherein the information display module is operated by power supplied from a portable battery or a solar cell battery.

5. The combined radar and laser detector as set forth in claim 1, wherein the signal processing unit of the signal

receiving module comprises:

a first local oscillator for producing oscillations of a first frequency, a sweep voltage generator for driving the first local oscillator, a first mixer for mixing the first frequency of the oscillations of the first local oscillator with the frequency of the signal received through the horn antenna, and outputting a difference signal, a first amplifier for amplifying the difference signal that is an output signal of the first mixer, second and third local oscillators for alternately producing oscillations of second and third frequencies, a second mixer for mixing the signal of the second and third local oscillators with the output signal of the first amplifier, and outputting a difference signal, a second amplifier for amplifying the difference signal that is an output signal of the second mixer, a filter for selectively passing the output signal of the second amplifier through, a demodulator for detecting the signal passed through the filter, and an analog to digital converter for converting the detected signal into a digital signal.